

Amendment and Response
U.S. Serial No. 10/608,809
Filed: June 27, 2003
Attorney Docket No: 210-609INT

AMENDMENTS TO THE SPECIFICATION

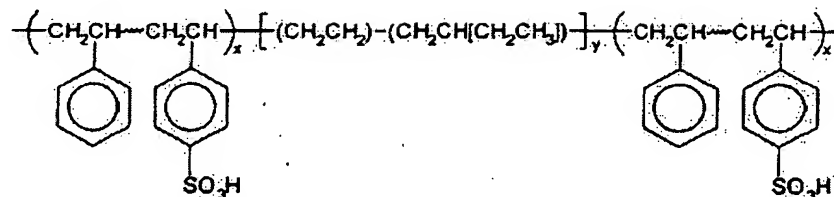
Please replace paragraph [0013] with the following paragraph, in which the spelling of the word "stricture" is corrected:

[0013] Both the sulfonated polymer membrane, comprising the perfluorinated backbone chemical structure, and the sulfonated polymer membrane, comprising the hydrocarbon chemical structure, significantly improve the plate-type heat exchanger's ability to transfer latent heat between air streams in comparison to the currently available plate-type heat exchangers comprising paper plates because both types of sulfonated polymer membranes have the ability to transfer a significantly greater amount of moisture. Additionally, the sulfonated polymer membrane comprising the hydrocarbon backbone structure is typically less expensive to manufacture than a sulfonated polymer membrane comprising a perfluorinated backbone structure because fluorine chemical processing is typically more expensive than ordinary hydrocarbon organic chemistry. Therefore, although there is a cost benefit for including an ERV having a plate-type heat exchanger constructed of sulfonated polymer membranes with a perfluorinated backbone ~~stricture~~ structure into an HVAC system, utilizing plates constructed of sulfonated polymer membranes having a hydrocarbon backbone would further increase the ERV's cost benefit.

Please amend into the Specification new paragraph [0041A] after paragraph [0041] and before paragraph [0042]:

[0041A] The material referred to in the previous paragraph as DAIS 585 ionomer has been described in the open literature having to do with fuel cells as a material that is a sulfonated styrene/ethylene-butylene/styrene tri-block copolymer, and is related to a class of polymers exemplified by Kraton, available from Shell Chemical. The structure of DAIS 585 can be represented by the structure given immediately below, in which it is shown that styrene monomers (e.g., a vinyl benzene or an arylvinyl monomer) is sulfonated, at least in part, and there are present olefinic monomers, such as ethylene.

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The structure shown above therefore is recognized to include at least partially sulfonated arylvinyl monomers (such as the sulfonated styrene). A process suitable for sulfonating the Kraton material is described in greater detail in U.S. Patent No. 5,468,574, at column 11, line 46, through column 13, line 2, which patent issued on November 21, 1995 and was assigned to the Dais Corporation.